Clovis Community College

2021-2022 Engineering: Electrical Transfer Preparation Associate in Science Degree
Complete the following program of study (Major C.3012.AS). Major requirements (44 units minimum).

A student earning one of these degrees will have completed the lower division coursework necessary to transfer into a bachelor's degree program in Electrical Engineering. In addition, a student earning this degree will be prepared for engineering internship opportunities.

Name: _____ **Student ID:** _____ **Date:** _____

Course Overview and Selection

Required Engineering Core:

Course	Course Description	Units	Completed	In Progress	Planned
ENGR 10	Introduction to Engineering	2			
MATH 5A	Math Analysis I	5			
MATH 5B	Math Analysis II	4			
MATH 6	Math Analysis III	5			
MATH 17	Differential Equations & Linear Algebra	5			
PHYS 4A	Physics for Scientists and Engineers	4			
PHYS 4B	Physics for Scientists and Engineers	4			

Courses Specific to Electrical Engineering Transfer

*Select a minimum of four courses:

Course	Course Description	Units	Completed	In Progress	Planned
ENGR 6	Electric Circuit Analysis with Lab	4			
**CSCI 40 *or* **ENGR 40	Programming Concepts & Methodology I *or* Programming for Scientists and Engineers	4 *or* 4			
***ENGR 5	Programming and Problem-Solving in MATLAB	3			
****CHEM 3A *or* ****CHEM 1A	Introductory General Chemistry *or* General Chemistry	4 *or* 5			
PHYS 4C	Physics for Scientists and Engineers	4			

Notes:

*Student should carefully plan which of these courses to take based on their specific major and intended transfer institution(s). Some transfer institutions will have minimum requirements for transfer that will necessitate choosing more than 4 courses from this section.

**As a first programming course, student should complete the programming course specifically required by his or her transfer institution of choice. The choices are: ENGR 40 Programming for Scientists and Engineers (4 units) and CSCI 40 Programming Concepts and Methodology I (4 units).

***Credit will not be given for both ENGR 40 and CSCI 40. If ENGR 5 was chosen as a first programming course, then the student could choose ENGR 40 or CSCI 40 as a second programming course. If ENGR 40 or CSCI 40 was chosen as a first programming course, then the student could choose ENGR 5 as a second programming course

****Students should check the minimum chemistry transfer requirements for his or her intended transfer institution.

Program Learning Outcomes:

1. Apply knowledge of mathematics, science, and engineering fundamentals to solve engineering problems.
2. Conduct laboratory experiments. Analyze and interpret the data resulting from these experiments.
3. Make basic design decisions concerning appropriate level engineering problems.
4. Communicate solutions to engineering problems using effective oral, written, and graphical methods.
5. Understand the impact of engineering solutions in a global and societal context.
6. Use the techniques, skills, and software tools of modern engineering practice.

Comments:

Faculty Advisor(s): C Glaves